

ABSTRACT

A process for purifying exhaust gas from a gasoline engine of the fuel-direct-injection type purifies exhaust gas that varies, in response to changes in the air-fuel ratio, between the first exhaust-gas state featured by an air-fuel ratio in the vicinity of the stoichiometrical air-fuel ratio and the second exhaust-gas state that forms a more oxidizing, low-temperature atmosphere and that is featured by an air-fuel ratio greater than the stoichiometrical air-fuel ratio, by using an exhaust-gas purifying catalyst (12) that contains at least one kind of noble metals, such as platinum, and transition metals. With the above-mentioned process, exhaust gas, which is discharged from a gasoline engine of the fuel-direct-injection type (1) that allows the air-fuel ratio to change between the stoichiometrical air-fuel ratio and air-fuel ratios within the lean burn mode, is purified by using the single purifying-use catalyst; therefore, it is possible to simplify the purifying operation for exhaust gas whose compositions and temperature vary widely due to frequent changes in the air-fuel ratio.